

U.S. Department of the Interior Minerals Management Service Gulf of Mexico OCS Region

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Cetaceans, Sea Turtles, and Seabirds in the Northern Gulf of Mexico: Distribution, Abundance, and Habitat Associations

Volume I: Executive Summary Volume II: Technical Report Volume III: Data Appendix

OCS Study MMS 2000-002, 2000-003, and 2000-004

The Minerals Management Service (MMS) announces the availability of a final report, *Cetaceans, Sea Turtles and Seabirds in the Northern Gulf of Mexico: Distribution, Abundance and Habitat Associations.* This final report provides scientific results from the program of the same name, an MMS-funded survey of these familiar animals in the northern Gulf of Mexico.

This study investigated the seasonal distribution and relative abundances of these communities over the offshore continental slope, which extends from the shelf to water over 2,000 m deep in the Western, Central, and Eastern Planning Areas of the Gulf. In these deeper waters there is increasing oil and gas activity and increasing numbers of petroleum platforms. Investigators participating in the study represented the National Marine Fisheries Service and the Texas A&M University at Galveston, with additional participants from the Texas A&M University Department of Oceanography and the Universities of Wisconsin and Colorado.

The primary objectives of this study were as follows:

- use fixed aerial and shipboard line transect visual methods and acoustic surveys to gather information on Gulf of Mexico cetacean (marine mammal), sea turtle and seabird populations, extending the database for another study, GulfCet I, temporally and into the Eastern Gulf;
- determine quantitatively which animals comprise these pelagic (open water) communities and estimate how they vary in territory, season, and numbers;
- determine habitat association factors that influence, limit, or control their distribution and relative abundance; and
- determine the reliability of methods for detecting pelagic communities.

For the habitat association investigation, focused surveys were conducted east and south of the Mississippi Delta in areas chosen for detailed study on the basis of real-time knowledge of the hydrographic and circulation patterns. Collections of midwater biota were taken, and many XBT and CTD casts were made to ground-truth remote satellite characterizations of sea-surface height and positions of the Loop Current and warm- and cold-core rings.

The study resulted in a refined estimate of territorial and seasonal distribution across the northern oceanic Gulf for many of the 28 known cetacean species in the Gulf, and it provided incidental estimates of seabirds and sea turtles. The study's results demonstrated that cetaceans and birds do have habitat preferences for areas that concentrate food resources through upwelling and circulation. The results also provided especially good information on distribution and habitat preference for the Gulf's only large endangered odontocete, the sperm whale.

This study and related earlier efforts have provided important information for the management of the MMS oil and gas program on the northern Gulf of Mexico continental slope and for the continued protection of these protected species.

For more information about this study or the Environmental Studies Program, contact the Environmental Sciences Section (MS 5430), 1201 Elmwood Park Boulevard, New Orleans, Louisiana 70123-2394, telephone (504) 736-2789.

You can obtain copies of the report from the Minerals Management Service, Gulf of Mexico OCS Region, at a charge of \$50.00 by referencing OCS Study MMS 2000-002 and 2000-003. You can obtain all three volumes for \$75 by referencing OCS Study MMS 2000-002, 2000-003, and 2000-004. You will be able to obtain this report also from the National Technical Information Service in the near future. Here are the addresses. You may also inspect copies at selected Federal Depository Libraries.

Minerals Management Service Gulf of Mexico OCS Region U.S. Department of Commerce National Technical Information Service Public Information Office (MS 5034) 1201 Elmwood Park Boulevard New Orleans, Louisiana 70123-2394 Telephone requests may be placed at (504) 736-2519 or 1-800-200-GULF or FAX: (504) 736-2620 5285 Port Royal Road Springfield, Virginia 22161 (703) 487-4650 or FAX: (703) 321-8547 Rush Orders: 1-800-336-4700

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Return to Technical Announcements